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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,227	11/14/2001	Hans-Dieter Borowsky	HHI-033US	7538

959 7590 05/14/2004  
LAHIVE & COCKFIELD, LLP.  
28 STATE STREET  
BOSTON, MA 02109

EXAMINER
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HARVEY, DIONNE

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 05/14/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/890,227

Applicant(s)

BOROWSKY ET AL.

Examiner

Dionne N Harvey

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1,3,6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier (U.S. 6,574,343) in view of Gnecco (U.S. 5,640,457).

Regarding claim 1, in figure 1, Meier teaches a treatment device for correcting impairments to hearing, comprising an essentially cylindrically shaped housing (shown), as broadly claimed, the housing having a battery compartment (figure 6A) and a sound exit opening (SA). Meier does not clearly teach that the housing is formed of metal and shields the electronics unit located therein against electromagnetic waves.

In column 3, lines 21-22, Gnecco teaches that it is well known in the art to construct the housing of a treatment device such that it is formed of metal, as broadly claimed, and whereby the electronic units of the treatment device are shielded against electromagnetic waves. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Meier and Gnecco, modifying the housing of Meier such that it is formed of metal and thereby shields the internal units from electromagnetic interference, for the purpose of providing a hearing device which is not adversely affected by radio signals.

Regarding claim 3, Meier teaches, in column 4, lines 60-62, that the sound exit opening may be sealed by an acoustically transmitting, water tight film (also see column 3, lines 53-56).

Regarding claim 6, The combination of Meier and Gnecco does not teach that the treatment device is free of external moving operating elements. However, the absence of said external moving operating elements is not critical to the operation of the hearing device. That is, one of ordinary skill in the art could easily construct a hearing device which does or does not include external operating elements, without undue experimentation and without detracting from the intended function of the device. Therefore, it is the Examiner's opinion that it would have been obvious to one of ordinary skill in the art at the time of the invention to construct the treatment device of Meier and Gnecco, such that it does not include external moving operating elements, especially where the hearing device performs automatic gain adjustment without the need for input from the user.

Regarding claim 7, The combination of Meier and Gnecco does not clearly teach that the housing is composed of titanium or a titanium alloy. However, it is well known in the art that titanium is a biocompatible material often used to construct the housings of hearing devices which are intended for implantation. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to construct the housing from titanium, titanium alloy or another metal thereby providing a means for shielding internal electronics from electromagnetic interference, and also having

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biocompatible characteristics such that the housing's close contact with the wearer's skin will not cause irritation.

2. Claims 2,4,5,8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier (U.S. 6,574,343) in view of Gnecco (U.S. 5,640,457) as applied to claim 1 above, and further in view of Narisawa (U.S. 6,041,128).

Regarding claim 2, The combination of Meier and Gnecco fail to clearly teach a battery compartment comprising a watertight seal from the rest of the housing. In column 8, lines 43-47, Narisawa teaches a battery compartment (see figure 12) comprising a watertight seal (45) for preventing the entry of moisture into the rest of the housing (31). It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the teachings of Meier and Gnecco, per the teachings of Narisawa, thereby providing a separate battery compartment for the battery unit and including a watertight seal, for the purpose of enabling the use of air-cell batteries in hearing devices wherein sufficient air entry is permitted without the undesired entry of moisture into the device interior.

Regarding claim 4, Meier teaches, in column 4, lines 60-62, that the sound exit opening may be sealed by an acoustically transmitting, watertight film (also see column 3, lines 53-56).

Regarding claim 5, in figure 13B, Narisawa teaches that the housing comprises a first housing component (42) with a battery compartment (40A) being fastened together with a second housing component (40) and an O-ring seal (45) located therebetween.

Regarding claim 8, Narisawa teaches retaining means (42) provided in the battery compartment to fix the position of the battery therein (when the two elements are joined together).

Regarding claim 9, in figure 8, Narisawa teaches that the battery compartment further comprises a hole (42C) for allowing external access of air to the battery.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meier (U.S. 6,574,343) in view of Gnecco (U.S. 5,640,457) in view of Narisawa (U.S. 6,041,128) as applied to claim 8 above, and further in view of Giannetti (U.S. 5,675,657).

Regarding claim 10, the combination of Meier, Gnecco and Narisawa does not teach that the retaining means (42) comprises a magnet.

Giannetti teaches that the retaining means (31) may include a magnet (45). It would have been obvious for one of ordinary skill in the art at the time of the invention to alter the combined teachings of Meier, Gnecco and Narisawa, per the teachings of Giannetti, thereby equipping the retaining means (42) with a magnet(45) so that the battery will not fall away from the housing when the retaining means (42) is removed.

***Conclusion***

***Allowable Subject Matter***


Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N Harvey whose telephone number is 703-305-1111. The examiner can normally be reached on 9-6:30 M-F and alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dionne Harvey

  
HUYEN LE  
PRIMARY EXAMINER